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Alternative Therapies for Perinatal Care:

A Holistic Approach to Pregnancy

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Abstract

This paper explores the many of the alternative and naturopathic options available for pregnancy, labor and delivery, and postpartum care and the advantages this type of care presents. The research discussed shows that many of these options can be very beneficial to the patient as well as being more accessible when travel restrictions are an issue, such as in the case of a patient living in a rural geographically isolated area. This paper discusses such therapy options as massage, music therapy, yoga, relaxation, acupuncture, acupressure, herbal remedies, hypnosis, and telecare as well as their implications for the healthcare team involved, focusing specifically on the role of the nurse in each type of therapy. Many research articles were examined and compared in order to suggest a medley of both modern medical techniques and alternative modalities of care to maximize the health status of both mother and fetus. Considerations for adapting a plan specific to a rural Alaskan setting are also reviewed.

Alternative Therapies for Perinatal Care: A Holistic Approach to Pregnancy

Introduction

For thousands of years, women have given birth in their homes, attended by relatives or midwives who have little or no formal training in modern medical methods. Instead, these birth attendants relied on alternative medicine techniques such as herbal remedies and other culturally-based traditions. However, since the medicalization of the birthing experience, hospitals have become the most common place for babies to be born. This is due in part to the availability of the latest technologies and medical treatments in hospitals to help in the case of complications or unforeseen problems for both mother and child. However, not every expectant mother has access to hospitals or birthing centers and many mothers still choose to have their babies in their homes. This is especially common in rural areas where logistical problems or cultural practices make getting to a medical center difficult, impractical, or impossible. Consequently, many unnecessary complications occur and mothers and babies die because birth attendants are not trained to handle and manage these conditions or do not have the proper supplies available to prevent or treat these problems. It is estimated that worldwide, over 530,000 women die each year due to birth complications (Le, Jones-Le, Bell & Miller, 2009). The risk of birth complications occurring can be significantly reduced through education about lifestyle changes during pregnancy and other activities that can be done to improve both maternal and fetal health.

In response to this overwhelming need for global change, nurses can play a part in educating patients and their support systems about how to implement a blend of modern medical techniques with time-honored and research-proven alternative therapies. Although there are many situations in which doctors and modern medicine cannot be replaced, research has shown that many homeopathic and alternative therapies can be quite effective and useful when it comes

to preventing many problems before they happen or improving outcomes after problems occur. These therapies, when used under the supervision of a licensed healthcare provider, can prove to relieve pregnancy related aches and pains, nausea, depression, and anxiety as well as being useful during the postpartum period for problems arising after the baby arrives. Nurses, as key contributors to patient education and as advocates for patient health and safety, can inform expectant mothers about holistic options for pregnancy care and help them to identify which of these options may be best suited to each individual case. Many alternatives offered by this more naturally focused medical paradigm are implemented as preventative measures in the prenatal period, which is a time in which the nurse plays a large role in patient care. Therefore, nurses need to be educated about and, in some cases, trained in the use of homeopathic pregnancy treatments so that they are able to provide holistic care to patients when called upon to do so. Some of the most common and highly researched alternative therapies used specifically for pregnancy-related ailments include herbal remedies, massage, yoga, acupuncture, acupressure, music therapy, and relaxation techniques. The purpose of this paper is to examine the alternative therapies available specifically for care during the perinatal period in terms of their effectiveness, safety, advantages when used with other types of medical care, the role of the nurse in implementing alternative therapies, and their potential use in a geographically isolated area such as rural Alaska.

Advantages to Alternative Therapies for Perinatal Care

Before discussing any specific alternative therapies with a woman during the prenatal period, a patient many need to be educated about the advantages of choosing to use alternative therapies during her pregnancy. Because these therapies are less commonly used than traditional medical treatments, it may be confusing to a new mother who is already dealing with the stress

and anxiety of the life changes a new baby implies why she would want to explore options other than the typical course of treatment. In this situation, the nurse can talk with the patient about benefits of alternative treatments before suggesting some specific therapies that may be best suited to the particular individual.

Availability and Risk of Side Effects

Any time a pregnant woman or a woman who is breastfeeding puts something into her body, there is a potential that the substance will cross the placenta into her developing fetus, be secreted in her breast milk, or affect her body in some other way that will have an impact on the child. This is especially true for modern pharmaceuticals and other potentially teratogenic compounds. Many conditions that affect mothers during their perinatal experience are not exclusive to pregnancy and can be effectively treated with contemporary medications in a non-pregnant individual. However, because of the potential effects on baby, some of these treatments are contraindicated with pregnancy.

For example, it is estimated that anywhere from 5% to 25% of mothers experience depression during their pregnancy or shortly after the birth of their children. Normally, major depressive disorder is treated with drugs such as selective serotonin reuptake inhibitors or monoamine oxidase inhibitors. However, the United States Food and Drug Administration has not approved any of the traditionally used classes of drugs for depression to be used during pregnancy and lactation (Lowdermilk & Perry, 2007). In this instance, a safer homeopathic remedy may be preferable. This is why it is crucial for the pregnant woman to consult with her physician about medications she may be taking and whether or not they are not safe for use during pregnancy. The nurse may be able to begin this discussion with a woman who has

recently become pregnant or at least mention the topic to both the woman and her doctor to ensure they discuss this direly important subject.

Additionally, there are many natural approaches to care during the birthing process to relieve the associated pain and discomfort. While it is outside of the nurse's scope of practice to write orders for traditional medications or make decisions about when technology is needed to assist the birth, the nurse can help laboring mothers using holistic techniques. Modern medicine treats labor pains with analgesia and anesthesia administered via an epidural or a peripheral intravenous line. However, in the instance of a home birth, this kind of pain intervention is unavailable as it would require equipment, monitoring, and personnel only found in the hospital setting (Lowdermilk & Perry, 2007). If a woman chooses to pursue a home birth or if location makes a home birth the only economical option available, other methods of pain management including alternative therapies should be explored.

Finally, this type of pain relief can have serious complications for both mother and fetus. Increased risks for the mother include increased rate of pulmonary edema, hypoventilation, hypotension, and formation of a thrombus or an embolus which could lead to other serious complications (Poole, 2003). Also, conventional analgesia has been shown to prolong the active stage of labor by an average of one hour, increasing the risk of other complications for both mother and neonate (Alexander, Sharma, McIntire, & Leveno, 2002). Each of these risks can potentially lead to serious long term conditions that would severely alter the mother's life and lifestyle. Adverse effects for the neonate include depression of the central nervous system which can lead to decreased responsiveness and ability to feed, transient behavioral changes, decreased platelet aggregation, decreased fetal heart rate variability during labor, hypotonia, and impaired thermogenesis. Generally, the effects on the neonate are temporary but some may become

permanent and lead to problems in the bonding between mother and child (Poole, 2003). For this reason, alternative therapies for pain relief during labor may be considered for the safety of both mother and child. The nurse can function as the patient's advocate by helping her explore natural options for pain relief during labor in addition to the traditionally-offered alternatives during the prenatal period.

Holistic Treatment for Mother and Child

Another major factor in the appeal of homeopathic and naturalistic obstetric care is its focus on the woman as a whole entity, rather than focusing on only one aspect of the individual. This take on healthcare is called holism, which emphasizes the inclusion of not only the woman's body in her care, but also her mind, emotions, spirit and environment (Davis-Floyd, 2001). In other words, a holistic approach to perinatal care acknowledges the impact of the pregnancy on a woman's family, social life, work status, finances, emotional responses, and the course of her future and then includes these considerations in the woman's individualized care (Davis-Floyd, 2001).

The American Nurses Association (ANA) supports this view of healthcare. The ANA's Code of Ethics for Nurses states that nursing care should incorporate the physical, emotional, social, and spiritual aspects of each individual regardless of circumstances or other factors (ANA, 2001). All in all, nurses should be trained in a holistic manner and taught to view the patient as an entire organism, rather than focusing on the presenting problem or chief complaint as other healthcare professionals may do.

Furthermore, a holistic view of perinatal care emphasizes the fact that childbirth is a natural process, not a pathological problem to be corrected. This is not to say that technology and

modern medical practices should not be used when needed, but rather they should be used in combination and harmony with the available holistic natural options to maximize the benefits and minimize the harm to mother and child at all points during their care (Moscucci, 2003). In fact, a hallmark of holistic obstetric care is that preparations for birth begin prior to pregnancy, in order to maximize the future mother's health status before she conceives. This way, the risk factors for potential problems such as low birth weight are reduced preemptively (Hobbins, 2003). Overall, these characteristics of holistic pregnancy care set this style of healthcare up to be quite successful and satisfying for both the mother and the healthcare team caring for her.

Logistical Considerations

The simplest argument to be made in favor of using naturopathic techniques for prenatal and postpartum care is that many of these treatments can be done in home rather than in a physician's office. While any medical or alternative treatments do need to be supervised by a licensed healthcare professional, things such as partner massage and herbal therapy can be done in the comfort of the patient's own home. For example, partner massage requires education from a trained professional but can then be done anywhere and at any time the expectant couple chooses to help soothe aches and pains associated with pregnancy (Field, Diego, Hernandez-Reif, Deeds, & Figueiredo, 2009). Many herbs and supplements can be bought in specialty stores without prescriptions; although, to maximize safety, the use of these products should be discussed with the healthcare provider involved in prenatal care (Walls, 2009).

Finally, as an alternative to in-office therapy sessions for the care of postpartum depression, research has shown that a telecare program could be just as effective while being more convenient for new mothers since they would not have to leave their homes to receive

counseling. This would resolve logistical problems such as childcare and travel considerations for these mothers whose lives are often stressful enough without having to make weekly trips to a counselor's office (Ugarriza & Schmidt, 2006). Most of the time, these alternative modes of care can be very easily adapted to use in the home and relieve some stress in what is already a potentially overwhelming transition time for a new family.

Homeopathic Prenatal Care

Previously mentioned, many alternative therapies are used as preventative measures to help decrease the likelihood of problems later in the pregnancy. Therefore, prenatal care is a major time for mothers to take advantage of these treatments. However, mothers cannot use therapies that they are unaware of so the nurse can be involved during the prenatal period in educating the mother about their options for care. Alternative therapies are also very helpful in easing some of the more uncomfortable symptoms of pregnancy, such as nausea, morning sickness, stretch marks, and pain without the unneeded risk for the developing fetus or to the mother.

Massage Therapy

Pregnancy brings many changes in a woman's life, including alterations in body image and function, lifestyle, plans for the future, and family processing. These alterations can sometimes be difficult and stressful. Additionally, as the pregnancy progresses, it is not uncommon for a woman to experience leg and back pain due to the increased weight of the growing fetus, increased stress and anxiety level caused by both pregnancy-related hormones and situational factors, and decreased quality and amount of sleep. Even though these changes may

be termed 'normal', they may greatly interfere with the expectant mother's life and ability to function on a daily basis.

A potential solution to these problems and others presented by a holistic approach to prenatal care is pregnancy massage. Massage is thought to increase the activity of the vagal nerve which has been linked to lower levels of the stress hormone cortisol in the mother's blood stream (Diego, Field, & Hernandez-Reif, 2005). Research has shown that lower blood cortisol levels result in decreased negative fetal activity in utero and decreased risk of premature birth (Field, 2008). A later study conducted by Field and her associates (2009) showed that pregnancy massage can reduce prenatal depression, anxiety, and back pain and improves sleep quality. Consequently, the rate of premature birth, low birth weight, and length of stay in the neonatal intensive care unit (if required) are significantly lower than those among infants born to mothers who did not receive massage while they were pregnant (Field et al., 2009). The nurse can be involved in training the pregnant woman's partner in massage techniques or referring the couple to someone who can. The nurse can also educate the pregnant woman about the benefits of massage and how often this therapy should be used. When the pregnant woman and her partner understand this therapy and its advantages, they will be more likely to utilize it effectively. Overall, pregnancy massage is cost-effective, safe, and has the potential to positively impact pregnancy outcomes.

Music Therapy

Another homeopathic option for prenatal stress and anxiety management during pregnancy is music therapy. Body changes, financial implications, and other stressors create an environment in which mothers may face significant stress, depression, and anxiety. When left

unaddressed, these conditions may cause serious problems for both mother and fetus. Prenatal depression, especially when untreated, predisposes mothers to postpartum depression after delivery, which will be discussed later. Maternal stress, anxiety, and depression can cause problems for the developing fetus such as low birth weight, premature birth, delayed development after birth, poor infant temperament, and poor newborn neurobehavioral functioning. Because of the potential harm caused by these mental states, something needs to be done to help mothers decrease and manage stress and anxiety during pregnancy. Music helps to relax listeners by stimulating the release of endorphins from the pituitary gland and consequently decreases the levels of adrenocorticotrophic hormone in the blood. These chemical changes diminish negative feelings and enhance an individual's ability to manage stress effectively, thereby reducing the risk of the harmful effects of prenatal stress and anxiety (Chang, Chen, & Huang, 2008). Music therapy is yet another example of a treatment that is an efficient use of resources and requires minimal physician supervision. In fact, a nurse could suggest and help to implement the use of music therapy for a pregnant woman independently.

Exercise and Prenatal Yoga

In addition to managing stress, exercise is an incredibly important aspect in any individual's pursuit to maintaining his or her health. However, the topic of exercise during pregnancy is somewhat controversial and requires evaluation on an individual basis with the woman's healthcare provider. Some argue that pregnant women should decrease the amount they exercise due to the risk of maternal hyperthermia, which has been shown to cause neural tube defects (Larsson & Lindqvist, 2005). However, it has been shown that if a mother exercises at a moderate level, she can reap the benefits exercise has to offer without putting her fetus at any real risk for neural tube defects (Field, 2008). Pregnancy-specific benefits of exercise include

better circulation leading to improved oxygenation for mother and fetus, better rest and relaxation during a time when sleeping can be difficult, and the release of endorphins, causing an enhanced sense of well-being (Lowdermilk & Perry, 2007). Because of the physiological changes produced by pregnancy, the exercise regimen a woman used before becoming pregnant may need to be altered in certain ways if she desires to continue during her pregnancy but a simple discussion with the doctor can help a pregnant woman determine what type of exercise would be best for her (Field, 2008). All healthcare providers should encourage all patients, especially pregnant women, to get plenty of exercise in order to maintain and maximize their health status, while also dispelling myths that pregnant women should not exercise. The nurse can help pregnant women identify exercise regimens that are safe and effective.

One specific form of exercise that is especially advantageous during pregnancy is yoga, which helps to improve balance, core strength, posture, and stamina. Yoga can be modified for use during pregnancy as well as after delivery to aid in mother-child bonding. One particular benefit to yoga is that it is low impact and can be done by anyone, regardless of skill-level or coordination. Yoga can also be safely done throughout pregnancy with no major risks to the developing child (Sun, Hung, Chang, & Kuo, 2009). Research has shown that yoga is more effective than walking in preventing pregnancy complications when done in equal amounts of time (Field, 2008). It is recommended that women do yoga for 30-60 minutes each day throughout the pregnancy (Sun et al., 2009). When done consistently throughout pregnancy, yoga can reduce the risk of intrauterine growth retardation, pregnancy hypertension, and preterm labor while also increasing the likelihood of higher birth weight of the fetus (Field, 2008). The nurse can educate patients about the benefits of yoga as well deciding which kind of yoga is best for the individual.

Relaxation

A major issue facing pregnant women and women in labor is managing stress and anxiety associated with the life-changing event of the birth of a child. This stress and anxiety can have serious effects on the neonate as they can increase heart rate, plasma catecholamines, cortisol levels, and resistance to blood flow through uterine arteries (Teixeria, Martin, Prendiville, & Glover, 2005). A simple and effective way to manage these symptoms is via relaxation techniques. These techniques can be active relaxation, such as guided imagery, or passive relaxation, such as sitting quietly and clearing one's mind.

The nurse can be closely involved in helping the patient to utilize these techniques (Field, 2008). Relaxation training is simple, cost-effective, and requires only a small time commitment. Strategies, such as guided imagery, breathing techniques, and meditation, can be taught to both the mother and her partner or birth coach. This can help during the birthing process as the partner can help to remind the woman of the techniques she desires to use. It is also beneficial for the mother to utilize these techniques during pregnancy to manage stress in preparation for the birth (Teixeira et al., 2005). One potential way in which the nurse can help an expectant mother learn such relaxation techniques is by referring mothers to prenatal classes that include relaxation training. Although education about what to expect during pregnancy, labor, and delivery can help to calm a pregnant woman, research has found that being trained specifically in techniques for relaxation is more helpful in reducing stress and anxiety (Bastani, Hidarnia, Kasemnejad, Vafaei, & Kashanian, 2005). Ultimately, when the time comes for the baby to arrive, mothers who have utilized relaxation throughout the pregnancy and continue to do so during the birthing process experience a lower rate of cesarean sections, instrument assisted births, and low birth weight as compared to mothers who did not utilize such preparations (Field, 2008). Overall, it would be

incredibly beneficial to both mother and fetus for the nurse to encourage the mother to regularly attend prenatal classes on relaxation throughout her pregnancy.

Acupuncture and Acupressure

While there are many alternative therapies that can be initiated and managed by the nurse independently, there are other kinds of homeopathic treatments that need to be administered and managed by a physician or another licensed medical professional. One such therapy is acupuncture. Acupuncture is a major component of Chinese medicine in which holistic and naturopathic therapies find their roots. This treatment is performed by inserting needles into the skin of the patient to specific depths and at highly exact locations of the body to help regulate the flow of energy (Lee, Chang, & Kang, 2004). With this modality of treatment, the nurse can be involved in teaching an expectant mother about acupuncture and its benefits as well as helping to refer her to an acupuncturist or a physician licensed in acupuncture. It is important to know that there are fake acupuncture treatments available that involve the insertion of needles to a more superficial depth and at random points on the body (Field, 2008). However, the false acupuncture does not yield the same positive results that true acupuncture does. Acupuncture is speculated to be similar to pregnancy massage in that it can be used prenatally to improve vagal nerve activity. Consequently, this increased vagal nerve activity reduces the level of cortisol in the mother's blood stream which helps to relieve lower back pain, pelvic pain, nausea, and vomiting (Field, 2008). Acupuncture has been found to be especially helpful with morning sickness associated with early pregnancy. In a randomized trial, women receiving acupuncture treatments reported fewer episodes of vomiting as well as being less upset overall by these episodes than women who did not receive acupuncture treatments, suggesting that acupuncture may have a psychological benefit as well as physical effects (Smith, Crowther, & Beilby, 2002).

Acupuncture can also be used during labor and delivery which will be discussed later in this paper.

Herbal Remedies and Supplementation

Along with exercise, diet is an incredibly important component to maintaining maximal health status. This is especially true during pregnancy, however often times the pregnant mother's diet is lacking in essential vitamins and nutrients. In such cases, supplementation can play a key role in ensuring that both mother and fetus receive the nutrients they need. Studies have shown that supplementation with folic acid is important for all women of childbearing age to prevent neural tube defects in any potential children these women may have (Lowdermilk & Perry, 2007). However, some speculation has been made about the benefit of combining folic acid with other nutrients to achieve maximal positive outcomes. A study done with women from Nepal found that folic acid and iron given together is the most effective combination at preventing postpartum hemorrhage when taken throughout the pregnancy (Christian, Kharty, LeClerq, & Dali, 2009). Additionally, supplementation with zinc and vitamin A has been proven to reduce the risk of emergency obstetric complications, such as hemorrhage and placental abruption, and poor birth outcomes, such as low birth weight, prematurity, and birth defects (Christian, 2003). Supplementation can be incredibly useful, especially for mothers who have little to no access to modern medical services because it can be managed via a course of correspondence with the healthcare provider (Christian et al., 2009). A nurse can be involved in keeping in touch with rural mothers, suggesting supplementation options, and maintaining communication between the doctor and patient.

Moreover, in order to help decrease the length of labor and the likelihood of complications, a mother can ensure that her body is prepared as much as possible for this marathon of physical exertion and mental effort. One way to prepare is through diet and exercise. Having a baby is hard work that requires strength, endurance, and stamina. Exercises suggested for pregnancy are discussed above and can help to build muscle tone and stamina for delivery (Field, 2008). Prenatal exercise as well as exercise prior to conception also helps to maximize the woman's overall health status, which in turn increases the likelihood of an uncomplicated pregnancy and the delivery of a healthy baby (Lowdermilk & Perry, 2007). All healthcare providers should encourage their patients to be physically active as much as possible, regardless of age or gender.

Diet is also important to preparing for the birth of a child. While eating healthy and avoiding stereotypical 'pregnancy foods' are important, any pregnancy diet can be enhanced by supplementation with plants and herbs. For example, red raspberry root can be made into a tea that, when drunk throughout pregnancy, can help to promote optimum body functioning, prepare the uterus for labor by strengthening its muscles, reduce the pain associated with childbirth, and decrease the length of labor. Red raspberry tea can also help decrease postpartum bleeding and decrease the likelihood and severity of postpartum depression (Woolven, 1997). Plants and herbs can also be used to make up for dietary deficiencies. For example, to correct a deficiency in calcium, a pregnant woman could have some kelp, dandelions, nettle, raspberry leaf, or chamomile (Walls, 2009). Finally, making teas with a blend of oatstraw, nettles, alfalfa, rose hips, and red raspberry helps to tone the uterus, nourish the body, and relax in the mind as the mother prepares for delivery (Walls, 2009). These and other herbs can be used under the guidance of a knowledgeable professional to improve overall pregnancy outcomes for both

mother and child while avoiding the serious and harsh side effects of mainstream pharmaceuticals.

Alternative Therapies for Labor and Delivery

Although there are many alternative therapies available for prenatal care, there are also many treatments that can be used during labor and delivery. While nurses do not make many of the decisions regarding the progression of labor, they are often involved with this exciting and terrifying process. Many mothers depend on the support and advice of their nurses to make it through this challenging experience. For this reason, the proficient nurse should be knowledgeable about alternative therapies that can be utilized during labor which are within the nurse's scope of practice. These treatments include massage, acupressure, and relaxation. In addition, the nurse can also suggest the use of alternative medications and treatments such as acupuncture, hypnosis, and herbal remedies to aid in the child birthing process, even though the final decision to employ these techniques lies in the hands of the attending physician or midwife.

Massage Therapy

One alternative therapy within the nurse's scope of practice for labor and delivery is massage therapy. Touch can be a powerful healing tool when used in correlation with an individual's preferences and comfort zone (Lee, Chang, & Kang, 2004). By an act as simple as holding a laboring woman's hand or rubbing her back, the nurse can communicate helpfulness, support, and caring without saying a word. It may also be helpful to both the laboring woman and her partner to direct the significant other to use these techniques as well, which provides support and comfort to the woman while also involving the partner in a simple way. The nurse should be vigilant to find ways in which to facilitate this kind of involvement when the couple

desires it. It is important to be familiar with the individual's history prior to employing comforting touch techniques because some patients may be uncomfortable with being touched or may have had past traumatic experiences that make being touched painful instead of helpful (Lowdermilk & Perry, 2008). One specific type of touch is massage, which can be helpful not only during the prenatal period as discussed before but also during labor and delivery. The main goals of massage therapy during this time are pain management and shortening the length of labor (Field, 2008). When it is appropriate, the nurse can either personally initiate massage techniques or direct the women's partner to do so in accordance with the couple's predetermined and expressed desires about what they want during their labor experience.

Many research studies have been done concerning massage and its different modalities in relation to use during labor. One study reported massage to be effective in reducing the pain of labor, especially in the first two phases of dilation. However, descriptive words about the quality of the pain were consistent between the control and experimental group, suggesting that massage improved the amount of pain the laboring woman was in but did not change the characteristics of that pain (Chang, Chen, & Huang, 2006). Another research study showed that when women received massage therapy for the first 15 minutes of every hour during labor, labor lasted an average of 3 hours less than women who did not receive any massage during labor (Field, Hernandez-Reif, Taylor, Quintino, & Burman, 1997). This suggests that massage not only reduces the amount of pain experienced during labor, but it is also helpful in expediting the process of birth (Field, 2008). Additionally, a variation on massage, ice massage, can be used specifically to reduce the pain of contractions. It is especially useful when used on the pressure point located between the thumb and first finger, which is the large intestine pressure point as defined by acupuncture (Waters & Raisler, 2003). A final variation on labor massage is perineal

massage. This technique consists of massaging and stretching of the perineum using some form of lubrication. This technique can be used during labor but it is most effective when used throughout pregnancy. It has been found that when perineal massage is used, the rate of episiotomies and other perineal trauma are reduced (Beckmann & Garrett, 2006). Overall, each of the many forms of massage that are available to be explored for each individual offer unique and specific advantages and benefits for those choosing to use them.

Acupuncture and Acupressure

As mentioned before, acupuncture is beneficial not only in prenatal care but also in the relief of labor pains, reduction of the use of epidurals, and in helping to naturally progress labor, thereby shortening the length of labor substantially. In a study that compared fraudulent acupuncture and true acupuncture during labor, the group receiving true acupuncture experienced lower pain levels after the first two hours of the acupuncture treatment, shorter active phases of labor, and needed less oxytocin to help stimulate labor overall. Furthermore, the mothers who received true acupuncture reported a high satisfaction level with the treatment and no adverse side effects were identified (Hantoushzadeh, Alhousseini, & Lebaschi, 2007). Other studies have had similar positive results when using acupuncture treatments during labor. Many studies have shown decreased use of drugs such as intravenous meperidine or epidural analgesics when acupuncture was chosen as a pain-relieving tool (Field, 2008). Although performing acupuncture requires special training, the benefits of using acupuncture have been proven many times and nurses find themselves in a position to advocate for the use of this very safe and advantageous therapy for their patients.

While the registered nurse cannot administer acupuncture, there is another type of treatment that is similar to acupuncture which is less invasive and well within the scope of

nursing practice. This treatment is called acupressure. Instead of using needles, acupressure involves applying a specific amount of constant pressure to certain acupoints located on the patient's body with the practitioner's fingers and hands. Acupressure can be very effective at treating labor related problems. Each acupoint is thought to be linked to specific organs or organ systems and applying pressure to these points can influence the free flow of energy to these organs to enhance their functions. One specific acupoint that is incredibly useful during labor is the SP6 pressure point which is located on the interior aspect of the calf four patient finger widths above the inner malleolus. When pressure is applied to this acupoint during contractions, pain levels are reduced and contractions are more efficacious, reducing the length of active labor. In Lee, Chang, and Kang's 2004 experimental study of the effects of SP6 acupressure, anxiety levels, use of analgesics, pain ratings, and duration of labor were all substantially decreased in the experimental group when compared to the control group. The control group received placebo touch, which suggests that the results were due to the acupressure and not just because of the perceived support and comfort from being touched by someone. Finally, there were no negative side effects that could be related to acupressure, signifying that this treatment is a safe, cost-effective, and advantageous option for use during labor (Lee, Chang, & Kang, 2004).

Acupressure can be performed by a nurse so long as he or she is knowledgeable about the location of acupoints and which points would be most helpful in certain situations. This form of treatment could also be taught to a significant other, family member, or friend during prenatal classes if so desired by the expectant mother.

Hypnosis

One of the more stigmatized alternative methods for pain management during childbirth is hypnosis. Although many view hypnosis as a side show attraction with no real value in a

serious medical situation such as childbirth, much success has been documented in using this method for not only pain management but also to reduce the fear, anxiety, and stress associated with labor and parenthood (Mehl-Madrona, 2004). Training for the use of hypnosis must begin during the prenatal period, as it must be determined whether hypnosis will be effective in each individual situation. For some individuals, hypnosis is contraindicated and will be either impossible or very difficult to achieve (August, 2009).

One study, conducted by Mehl-Madrona (2004), compared hypnotherapy with attention-only prenatal sessions and found that hypnosis was incredibly successful in facilitating uncomplicated births for mothers who were open and receptive to the idea of its use. These women received hypnosis training starting in their first or second trimester of pregnancy in order to prepare for the birth of their children. The training included visualization of the birthing process, suggestion of well-being and comfort during the birth by the instructor (usually a physician's assistant), and preparation for what would be experienced. When time came for birth, mothers who received hypnotherapy during their prenatal care were more likely to have an uncomplicated, normal delivery, free of assistive devices and pharmaceutical analgesia than their counterparts who were not trained in hypnotherapy techniques (Mehl-Madrona, 2004). Finding a medical professional trained in hypnosis to train mothers during the pregnancy and attend the birth to administer hypnosis in order to control anxiety and manage pain may be difficult in some areas, but it is a viable option for mothers who desire non-pharmacologic analgesia and a natural approach to the birthing process.

For mothers who desire to utilize hypnosis but do not have access to a trained physician or other healthcare professional for the actual birth, the individual can be taught to hypnotize herself, which is called self-hypnosis. In Cyna, Andrew, and McAuliffe's 2006 study of the

effectiveness of self-hypnosis during labor and delivery, education about self-hypnosis techniques began during the last month of pregnancy and consisted of 40 to 60 minute weekly sessions that focused on positive thinking and imagery while putting oneself in a hypnotic state. Mothers were trained to focus on the rest periods between contractions and to appreciate the force and power of each contraction as a step in progressing towards the birth of the baby. This type of positive thinking creates a positive energy which aids in relaxing the body and calming the mind to help reduce the amount of pain experienced. However, the effectiveness of this intervention depends on the receptiveness of the mother. Mothers were classified into high, moderate, and low hypnotizability groups based on how successful they were in prenatal attempts to achieve self-hypnosis and benefits of self-hypnosis reflected these classifications. Overall, mothers who used self-hypnosis were less likely to have epidural analgesia and were less likely to need oxytocin or other drugs to help progress labor. Hypnosis is also an attractive option for non-pharmacological pain management because it is not contraindicated with prenatal pregnancy complications, such as pre-eclampsia, as are other therapies (Cyna, Andrew, & McAuliffe, 2006). In addition to being useful in managing pain, self-hypnosis has also been proven to be useful in reducing the fear and anxiety associated with delivery and to reduce the risk of birth complications because it helps to calm and focus the mind (Field, 2008). Overall, whether physician-guided or self-guided, hypnosis can be a powerful tool in the labor and delivery process if the mother believes it can work for her and learns the proper techniques.

Herbal Remedies

Finally, as mentioned before, herbal remedies can be very useful during the perinatal period in curing or diminishing the effects of some of the more unpleasant side effects of pregnancy. However, it is also important to know that there are many herbal supplements that

should not be used during pregnancy because they have been known to induce labor or have other adverse effects on the pregnancy. Some of these herbs can be useful, however, in late pregnancy to help stimulate and progress the delivery of the baby. Examples of uterine stimulants, or emmenagogues, to be used after 37 weeks gestation or later are blue cohosh, black cohosh, motherwort, birthwort, cottonroot, shepherd's purse, dong quai, and squaw vine (Walls, 2009). These herbs can be consumed in different ways such as made into a tea or applied topically and should be discussed in depth with a doctor. Discussing the selected remedy with an herbalist or another professional knowledgeable in alternative medicine is also recommended in order to ensure the proper amount is used and the herb is taken in the proper way. Using herbal remedies have been shown to help to enhance energy, balance emotions, augment labor, relieve labor pains, and prevent exhaustion during the birthing process (Wall, 2009). Other herbs that can be used during delivery are black haw, cramp bark, pennyroyal leaf, and black yaw (Woolven, 1997). These herbs can stimulate contractions to help enhance labor, ease the tension between contractions, and decrease the pain level associated with active labor and contractions (Woolven, 1997). When faced with an instance in which drugs are contraindicated or undesired, a physician may choose to go with this more natural option. The nurse may suggest the use of these herbs in an instance when the doctor may be unaware of their usefulness or availability.

Holistic Care for the Postpartum Mother and Child

Finally, it should not be surprising that there are also alternative therapies for use after the birth of the baby. Major goals of these postpartum treatments are the relief of postpartum depression and its symptoms, to regulate the milk supply for breastfeeding mothers, to treat sore nipples from feeding, and to prevent or decrease the likelihood of postpartum hemorrhage. Once again, most of these treatments are focused on the woman as a whole and can be utilized at home

after being discussed with the physician, as was the case for many of the discussed prenatal alternative therapies.

Telecare

First, a major focus of any postpartum care is the screening for, prevention of, and treatment of postpartum depression. Having a baby is one of the most emotional and stressful events a woman will experience in her life. Fluctuating levels of hormones, minimal amounts of sleep, and sometimes extreme lifestyle changes can all factor in to potentially serious emotional problems. Postpartum depression occurs in about 20% of all new mothers and can occur at any point in the first year of the child's life (Spectrum Health, 2010). Although the exact causes are unknown, risk factors include pre-existing or prenatal depression, stress from either child care or life in general, self-esteem issues, lack of support from significant others, family, and friends, a fussy or temperamental infant, single parenthood, low socioeconomic status, and negative or uncertain feelings towards the pregnancy (Lowdermilk & Perry, 2007). Although many mothers feel some degree of "baby blues" after delivery, postpartum depression is serious because if left untreated, it can lead to self-care deficits and violence toward the mother herself or towards her infant and other children (Lowdermilk & Perry, 2007). Postpartum depression needs to be treated but many barriers exist that may prevent mothers from receiving the care they truly need. These obstacles include lack of knowledge about postpartum depression among both patients and healthcare providers, minimization of symptoms by mothers because of the stigma associated with mental illnesses, and logistical problems in making it to counseling appointments (Ugarriza & Schmidt, 2006). Nurses can be involved in helping to breakdown some of these barriers between patients and proper treatment. It is important that all mothers are screened for postpartum depression before leaving the hospital and that mothers who are identified as being at

risk for postpartum depression be properly educated about this illness and its consequences. Nurses play a critical role in the screening process, educating mothers, making proper referrals, and advocating for social changes to remove the stigma currently placed on postpartum depression and other such mood disorders associated with pregnancy.

To ensure the safety of mother and child, postpartum depression requires proper medical attention. One of the most useful non-pharmacologic treatments is psychotherapy. Normally, this type of treatment is done by a psychiatrist in an office on a scheduled basis. However, as any mother with an infant can attest to, postpartum life is unscheduled and hectic. Keeping regularly scheduled appointments at a location outside of one's home can be a logistical challenge. One potential option for dealing with the demands of trying to make psychotherapy work for a mother with postpartum depression is to schedule telephone appointments for counseling, a treatment regimen referred to as telecare.

Ugarriza and Schmidt (2006) conducted a research study about the feasibility of such a program and whether or not it would be effective for mothers diagnosed with postpartum depression. The experimental program consisted of 10 weekly phone calls, each lasting approximately one hour and involving consultation with a graduate psychiatric-mental health nursing student. These sessions included discussions about topics related to either managing symptoms of depression when they occur or preventing those symptoms in the future through the use of relaxation techniques, problem-solving strategies, and cognitive-behavioral therapy. The researchers determined that this type of program could be very beneficial to new mothers because it reduces time requirements by eliminating travel time and can eliminate the need for childcare during sessions. It is also possible to schedule these appointments around other commitments the mother may have. Mothers involved in this experimental program reported that

the program was very beneficial and helped them to overcome their depression (Ugarriza & Schmidt, 2006). Although this was a small study, its results suggest that such a program could be largely beneficial to new mothers struggling with postpartum depression. Nurses could become active in implementing such a program in their hospitals and communities.

Herbal Remedies

Finally, although they can be extremely helpful during the prenatal period and during delivery of the baby, herbal remedies can also be used in the treatment of postpartum problems. While deciding which medications and herbal supplements to use after delivery, it is important to consider that many substances put into the mother's body will be secreted in her breast milk and affect the baby. The effects on the infant can be quite profound as its body mass is much lower than that of the mother's and it is still rapidly developing physically. However, many herbs have been approved as being safe for use while breastfeeding.

As discussed previously, a major problem facing many mothers during the postpartum period is postpartum depression. Herbal medicine can help to relieve the symptoms of this disorder and can allow mothers suffering from postpartum depression to maintain a level of normal functioning in their daily lives. For any postpartum mother having an especially emotional day, valerian capsules can help to reduce mood swings and balance emotions. In a case of a mother diagnosed with postpartum depression who feels strongly about breastfeeding and should therefore not be prescribed a selective serotonin reuptake inhibitor or a monoamine oxidase inhibitor, the physician may consider using St. John's wort as a natural alternative. Clary sage, patchouli, sandalwood, ylang ylang, or rose essential oils can be applied topically, massaged into the skin, or added to bath water to help keep a new mother's emotions balanced

and under control (Walls, 2009). Teas can be made from chamomile, lemon balm, catnip, oatstraw, passionflower, and lavender to aid in relaxation, stress reduction, and sleeping postpartum (Walls, 2009). Any of these natural remedies can be suggested by the nurse for the new mother to talk about with her physician.

There are also various other benefits herbal remedies have to offer to mothers after the baby arrives. For mothers who experienced perineal trauma or tearing during birth, compresses of comfrey leaf or root, plantain, calendula, mullein, slippery elm, aloe, or marshmallow can help to ease the pain and promote tissue repair (Walls, 2009). Also, applying aloe directly to the perineum can help to relieve pain. In order to increase a lacking milk supply, nursing mothers can make a tea out of nettle leaf, fennel seed, and fenugreek seed to drink. If a breastfeeding mother finds she is not producing enough milk for her infant, she may consider using a galactagogue, or an herb that will increase her milk supply. These herbs include blessed thistle, vitex, milkwort, goat's rue, and alfalfa. Conversely, if a woman is producing too much milk and her breasts become engorged and uncomfortable, peppermint or sage teas in small amounts are recommended. This needs to be done in small increments to avoid decreasing the milk supply too much. If a nursing mother's nipples become sore, she can use a compress similar to those recommended for perineal healing. Other options for sore nipples include a salve of calendula petals and mullein leaf, a compress of marshmallow root pieces, or tea bags applied directly to the breasts after feedings (Walls, 2009). Finally, immediately after birth, if a mother hemorrhages, yarrow, blessed thistle, or shepherd's purse can help to stimulate the contraction of the uterus to clamp off the uterine arteries and decrease the bleeding (Woolven, 1997). Each of these remedies have been found to be safe for breastfeeding mothers, but as with any medication, they should be discussed with the doctor caring for the new mother to ensure safety and prevent

unwanted interactions with other medications and side effects. The nurse may be able to help the doctor in this matter by doing research about specific herbal remedies and how they interact with other medications being taken or their compatibility with breastfeeding.

Considerations for Use in Rural Alaska

Although alternative and natural therapies are available for use and offer great advantages to any expectant mother, this type of care is especially attractive to mothers living in rural areas where modern medical treatments are difficult to obtain or inaccessible due to travel and other logistical considerations. One such area is rural Alaska where there are hundreds of tiny isolated villages to which travel is difficult. These villages are home to many native people groups who have lived in the area for thousands of years and have rich cultural backgrounds. According to the Alaskan Native Heritage Center (ANHC) (2008), there are eleven distinct native people groups living in Alaska, each with their own language, beliefs, and cultures. These people groups include the Aleutians, Yup'iks, Inupiaq people, Athabascan people, and Alutiiq peoples among others (ANHC, 2008). Alaska's peoples are spread out through its vast lands, with an average of 1.1 persons per square mile which is drastically lower than the national average of 79.6 persons per square mile. This suggests that many women may be geographically isolated and cannot access doctors or hospitals on a regular basis during any pregnancies that may occur. However, 88.3% of persons reported having a high school diploma or higher, suggesting that many people are educated and could be easily taught about alternative therapies and their advantages (United States Census Bureau, 2010). Overall, this area could benefit greatly from a program focused on educating rural women about the alternative options for pregnancy care available to them and the advantages associated with these options. Such a program could be designed and implemented

by a nurse or a team of nurses passionate about improving the quality of care available to rural Alaskan mothers.

Local Culture and History

Alternative therapies can be extremely advantageous to any woman who chooses to use them but it is also important to consider the individual's belief system and culture and how these aspects would influence a decision about what kind of care is sought for pregnancy. In the past, Alaskan native women delivered their babies with the help of a traditional midwife. For the Alutiiq people group, a midwife typically had no formal training but instead was chosen by the leaders of her tribe and then received training by observing the current midwife until the time came for her to take over from the older woman. One kind of treatment provided by the midwife included steam baths called banyas in which the midwife or another female relative would strike the pregnant woman's stomach with a wainiik (a bundle of willow twigs). This treatment was done in preparation for the birth. The steam was thought to help strengthen the women and prepare the body for labor. The wainiik was thought to help increase circulation and bring the blood of new life to the surface of the skin. Although many modern healthcare providers may question the value of such treatments, these alternative therapies carry with them the belief and tradition of the Alutiiq people. Midwives would often have to travel from village to village in order to care for laboring mothers as there was not always a midwife in each village. Because of this sacrifice for her people, the midwife was often very revered and appreciated by her people (Mulcahy, 2001). For the Inupiaq people, birth is seen as a highly spiritual event, as it is believed that the baby is a reincarnated spirit from someone who is recently died. The baby is often named after a recently deceased relative (ANHC, 2008). Ultimately, when the nurse is knowledgeable about an individual's beliefs and culture, he or she can help a pregnant woman to select

treatments that are congruent with these traditions and will be most beneficial in her individual case.

Conclusion

The nurse can be a powerful activist in ensuring that any pregnant woman receives the best care possible in agreement with her individual desires and within her unique circumstances. When the nurse is educated in as many modes of treatment as possible, he or she can then teach patients about their options for treatment and make recommendations about what may work best. Alternative therapies offer a decreased likelihood of side effects over modern medications and treatments while often times being as effective as their mainstream counterparts. In many cases, homeopathic treatments can be managed on an in-home basis under the supervision of a nurse after the approval of a physician. Additionally, this modality of medical care is often incredibly economical, requires minimal extra effort, and can empower an expectant mother to take charge of her own care. Some of these treatments may require extra training or certifications and others may be beyond the scope of nursing practice. However, at the very least, nurses can be involved in making referrals and ensuring that patients are aware of all of their options. Because many of the alternative therapies discussed are somewhat controversial due to certain stigmas associated with them, it is the nurse's duty to stay informed about the latest research on the topic and to be active in helping to remove these stigmas from truly beneficial treatments. Ultimately, alternative therapies can be part of the nurse's area of expertise.

Although alternative therapies are beneficial and useful to any mother willing to use them, they are of special importance to those mothers living in rural areas, such as Alaska. Use of this type of care can minimize the need for long travels to a doctor's office or hospital as well

as help to ensure that cultural preferences are taken into consideration. Mothers are empowered to participate in managing their own pregnancy care and outcomes have been shown to be more positive when alternative therapies are used in conjunction with available modern medical techniques. There has been research done about using alternative medicine in other rural areas, such as Tibet (Le et al., 2009) and Nepal (Christian, 2003) and more research should be done in other areas that pose challenges to accessing modern medical facilities. In this way, the incidence of birth complications can be reduced and the health status of mothers and children can be improved globally.

Ultimately, the goal of any pregnancy should be a healthy mother and child. Healthcare providers should be knowledgeable or at least informed about any techniques that may help to reach this endpoint. Alternative therapies for perinatal care are starting to come back into popularity and can be extremely effective in pregnancy care, especially when blended with modern medicine when possible. Each case must be evaluated individually and a unique plan developed for each mother. Nurses, as part of the interdisciplinary healthcare team, can play an important role in helping to educate patients about these homeopathic options and how they can fit into their birth plan. Therefore, whether living in a rural village or a big city, delivering at home or in a hospital, every mother should be educated about all of her options for her perinatal care and allowed to choose the treatments she feels will suit her best.

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